

Title (en)
MASS SPECTROMETER

Title (de)
MASSENSPEKTROMETER

Title (fr)
SPECTROMÈTRE DE MASSE

Publication
EP 3047508 B1 20220511 (EN)

Application
EP 14772189 A 20140917

Priority
• GB 201316767 A 20130920
• EP 13185440 A 20130920
• GB 2014052825 W 20140917

Abstract (en)
[origin: WO2015040391A1] Apparatus for a mass spectrometer is disclosed comprising an ion source, a heater (230) for heating a gas flow (224) to the ion source, a temperature sensor for monitoring the temperature of the heater (230), and a control system (236). The control system (236) is arranged and adapted to determine a flow rate of the gas flow (224) by monitoring the power supplied to the heater (230) and the temperature of the heater (230).

IPC 8 full level
H01J 49/04 (2006.01); **G01F 1/68** (2006.01)

CPC (source: EP US)
H01J 49/0027 (2013.01 - US); **H01J 49/025** (2013.01 - US); **H01J 49/0422** (2013.01 - EP US); **H01J 49/10** (2013.01 - US);
G01F 1/68 (2013.01 - EP US)

Citation (examination)
• US 6147347 A 20001114 - HIRABAYASHI ATSUMU [JP], et al
• US 2008066541 A1 20080320 - BURTON BRUCE B [US]
• JOOST LÖTTERS: "ECONOMICAL THERMAL MASS FLOW SENSOR BASED ON CONSTANT TEMPERATURE ANEMOMETRY", CLAIMED TO HAVE BEEN PRESENTED AT SENSOR 99, MAY 18-20, 1999. NÜRNBERG, GERMANY, 20 May 1999 (1999-05-20), pages 1 - 6, XP055542056, Retrieved from the Internet <URL:http://www.tuncell.com/userfiles/sensor99.pdf> [retrieved on 20190115]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2015040391 A1 20150326; EP 3047508 A1 20160727; EP 3047508 B1 20220511; US 2016233067 A1 20160811; US 9779924 B2 20171003

DOCDB simple family (application)
GB 2014052825 W 20140917; EP 14772189 A 20140917; US 201415022634 A 20140917